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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/875,324	06/06/2001	Scott D. Guthrie	40062.98US01/MS160314.1	7515
27488	7590	01/10/2006	EXAMINER	
MERCHANT & GOULD (MICROSOFT)			ZHONG, CHAD	
P.O. BOX 2903			ART UNIT	
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2152

DATE MAILED: 01/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/875,324

Applicant(s)

GUTHRIE ET AL.

Examiner

Chad Zhong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 41-58 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 41-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### OFFICE ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/28/2005 has been entered. Claims 1-58 are presented for examination. In amendment, filed on 10/28/2005; Claims 1-40 are cancelled; Claims 41-58 are presented for examination; Claims 41 and 50 are currently amended.

2. Applicant is required to update the status (pending, allowed, etc.) of all parent priority applications in the first line of the specification. The status of all citations of US filed applications in the specification should also be updated where appropriate.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371 (c) of this title before the invention thereof by the applicant for patent.

4. Claims 41-47 and 50-56 are rejected under 35 U.S.C. 102(e) as being anticipated by Craig et al. (hereinafter Craig), US 6,757,708.

5. Craig is cited by the Examiner in a previous office action.

6. As per claim 41, Craig teaches a method for automatically creating data exchange schema data on

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a network server corresponding to remote processing services provided by the network server for source code corresponding to data processing objects used to provide the remote processing services upon receipt of a request from a client process, the method comprising:

storing a source code file within the mass storage of the server (Col. 12, lines 5-10, wherein the JSP source code are stored on the server side inherently);

compiling the source code file to generate a data processing object (Col. 12, lines 5-10, wherein the JSP are compiled dynamically on the server); and

automatically generating the data exchange schema data that specifies how to exchange data between the server and the client process for the data processing object generated when the source code file is compiled to generate the data processing object that provides the requested processing service (wherein the data exchange schema are represented by information contents in the beans, specifically, XML schema tags are part of the Bean structure (Craig, Col. 10, lines 58-61). Further, Craig teaches the beans are populated by user requests (Col. 5, lines 5-25), in addition, the beans are instantiated/generated and then executed on the server side (Craig, Col. 12, lines 5-22), the bean tags will specifically define the information of interest as well as parameters associated with HTTP session parameters (Craig, Col. 10, lines 5-16), thus realizing how to exchange data between server and client process).

7. As per claim 42, Craig teaches the method according to claim 41, wherein the method further comprises storing the data exchange schema data within the web services library for use by subsequent processing service requests (see for example, Fig 3, item 430, 475).

8. As per claim 43, Craig teaches the method according to claim 42, wherein data exchange schema data comprises an HTML representation for a web page containing a description of exposed data processing services (Col. 10, lines 55-60).

9. As per claim 44, Craig teaches the method according to claim 43, wherein the web page

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comprises:

a textual description of each exposed data processing service based upon data stored within the source code file (Col. 10, lines 55-65);

a description of each input argument accepted by each exposed data processing service, the description includes a description of the input argument and a description of the data format for the input argument data expected by the exposed data processing service (Col. 10, lines 5-15; wherein input description are in the forms of JSP/beans/tags, in one embodiment, input parameters are HTTP request parameters); and

a description of each output data value generated by each exposed data processing service (Col. 9, lines 25-40).

10. As per claim 45, Craig teaches the method according to claim 44, wherein the description of each input argument further comprises an input field upon the generated web page for permitting a user to input a value to be passed to the exposed data processing service as the corresponding input argument (Col. 9, lines 20-40; Col. 5, lines 5-25, wherein the input fields are HTTP parameter input in one embodiment).

11. As per claim 46, Craig teaches the method according to claim 45, wherein the description of each output data value generated by each exposed data processing service further comprises an activate button which causes the remote data processing service to be activated using the values contained within the, input fields corresponding to the input arguments as the input arguments submitted with the remote data processing service request (Col. 9, lines 20-40, lines 40-55; Col. 5, lines 5-25; ).

12. As per claim 47, Craig teaches the method according to claim 42, data exchange schema data comprises a specification for the input and output data schema expressed in a data transfer specification

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language (Col. 9, lines 20-40; Col. 5, lines 5-25).

13. As per claims 50-56, claim 50-56 are rejected for the same reasons as rejection to claim 41-47 above respectively.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 48 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig, as applied to claims 47 and 56 above, in view of 'Web Services Description Language', Curbera et al., March, 2001 (hereinafter Curbera).

16. Curbera is cited by the Examiner in a previous office action.

17. As per claim 48, Craig disclose the invention substantially as rejected in claim 47 above, but does not explicitly teach the data transfer specification language comprises a Web Services Description Language representation for the data exchange schema data.

However, Curbera teaches data transfer specification language comprises a Web Services Description Language representation for the data exchange schema data (pg 1, abstract).

It would have been obvious to one of ordinary skill in this art at the time of invention was made to incorporate Curbera with Craig because the combination would improve the functionality of Craig by providing for flexibility of communications (as shown by example Col. 10, lines 55-60 of Craig, where as anyone of a plurality of web services languages can be utilized to perform data exchange schema)

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between the end nodes of the network, allowing description of endpoints and their messages regardless of what message formats or network protocols are used to communicate (Curbera, pg 1, Abstract).

18. As per claim 57, claim 57 is rejected for the same reasons as rejection to claim 48 above.

19. Claims 49 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Craig, as applied to claim 47 and 56 above, in view of "Metadata Activity Statement", February 2001, (hereinafter Meta).

20. As per claim 49, Craig disclose the invention substantially as rejected in claim 47 above, but does not teach the data transfer specification language comprises a Resource Description Format representation for the data exchange schema data.

However, Meta teaches the data transfer specification language comprises a Resource Description Format representation for the data exchange schema data (Meta, pg 2, lines 8-14).

It would have been obvious to one of ordinary skill in this art at the time of invention was made to incorporate Meta with Craig and Meta the combination would provide for compatibility of communications (as shown by example Col. 10, lines 55-60 of Craig, where as anyone of a plurality of web services languages can be utilized to perform data exchange schema) between the end nodes of the network wherein different websites can easily share information with each other utilizing RDF framework.

21. As per claim 58, claim 58 is rejected for the same reasons as rejection to claim 49 above.

### ***Response to Arguments***

22. Applicant's remarks filed 10/28/2005 have been considered but are found not persuasive in view of Applicant's arguments.

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23. In the remark, the Applicant argued in substance:

a) Craig fails to disclose or suggest “generating data exchange schema data as claimed in claim 41”.

b) Craig fails to disclose or suggest “storing the data exchange schema in a web services library. As JSPs are written with knowledge of how to interface with Java Beans, Craig does not need to save a data exchange schema in a library”.

c) Craig fails to disclose or suggest “web page that is part of data exchange schema for a processing object”.

d) “there is no schema in Craig where all of this information is made available such as to a client”.

e) Craig fails to disclose or suggest “an input field that is part of a data exchange schema”.

f) Craig fails to disclose or suggest “a button that causes the service to generate the output”.

g) Craig fails to teach or suggest “automatically generating the data exchange schema data that specifies how to exchange data between the server and client process for the data processing object generated when the source code file is compiled to generate the data processing object that provides the requested processing service”

In response to Applicant’s arguments:

a) the schema information are presented in java beans themselves. The beans act as containers for object information (Col. 9, lines 5-40), and user input as requests are populating the beans (Col. 5, lines 5-25) and the request are executed on the server as part of the dynamic page generation (Col. 12,



lines 5-22).

Craig discloses tags are generated in XML as the dynamic content is returned to the user (see Col. 10, lines 55-65; Col. 17, lines 10-17), this occurs after the server executes the dynamically compiled JSP servlets and instantiations of the beans (Col. 12, lines 5-20). The RMI request is to allow the remote server to generate dynamic contents for a webpage, the generated contents are stored within the bean and send back to the user. The Applicant further contends that beans are pre-programmed by a developer, and that the output of the bean is already known in advance. This property holds true in Java as well as non-Java technologies, the RMI/RPC methods must be pre-programmed to invoke a remote method execution on the server side. The developers would know the outcome of the invocation because they will test the products in test runs. The beans are pre-programmed by a developer and the methods within the bean are then executed on the server as part of the RMI/RPC procedure for requesting dynamic web contents. Hence, Craig teaches generating data exchange schema.

b) Craig teaches caching of dynamic web contents for future use in a database. This can be located in Col. 11, lines 20-37. Hence, Craig teaches storing the data exchange schema in a web services library.

c) In response to Applicant's arguments, dynamically generated web contents contains exchange schemas in the form of XML, HTML etc. tags. Hence, Craig teaches this limitation.

d) It is noted that the features upon which applicant relies (i.e., information made available to a client) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Furthermore, Craig teaches input parameters in the form of HTTP request, these parameter are

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made available to the client, see for example, Col. 5, lines 5-25.

Hence, Craig teaches input information made available to the client.

e) In response to Applicant's remarks, Craig defines in the background what is meant by dynamic content in the form of prior art. Dynamic contents are used in ecommerce applications and shopping cart applications online, the invention deals with caching of such contents, see for example, Col. 3, line 25-60. The shopping cart/ecommerce applications inherently have input fields for user entry. This idea is further exemplified in Col. 9, lines 45-55, wherein the developer and domain expert works together to anticipate what users must input to obtain the dynamically generated contents. Hence, Craig discloses input fields that is a part of the data exchange schema.

f) In response to Applicant's remarks, Craig teaches the 'button'. See the ecommerce example again, as shoppers adds more information to the cart, his/her cart information would dynamically get updated to avoid stale data. The users send HTTP requests to update the webpage, i.e. through entry of a web URL or clicking on a link to allow for dynamic generation of contents, see for example, Col. 9, lines 5-30. Furthermore, the application developer and domain expert would agree which dynamic method to execute upon a invocation from the client, it should be noted that the developer/domain expert knows the type of method the requestor will attempt to invoke, they do not know the exact data which will be generated per request. Hence, Craig discloses the button that generate the output.

g) Graig teaches automatically generating the data exchange schema data that specifies how to exchange data between the server and the client process for the data processing object generated when the source code file is compiled to generate the data processing object that provides the requested processing service (wherein the data exchange schema are represented by information contents in the beans, specifically, XML schema tags are part of the Bean structure (Craig, Col. 10, lines 58-61). Further, Craig teaches the beans are populated by user requests (Col. 5, lines 5-25), in addition, the beans are

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instantiated/generated and then executed on the server side (Craig, Col. 12, lines 5-22), the bean tags will specifically define the information of interest as well as parameters associated with HTTP session parameters (Craig, Col. 10, lines 5-16), thus realizing how to exchange data between server and client process).

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents and publications are cited to further show the state of the art with respect to "PROVIDING REMOTE PROCESSING SERVICES OVER A DISTRIBUTED COMMUNICATIONS NETWORK".

- i. US 6542908 IMS.
- ii. "Server Side Java", Kaffe, Jan 16, 1998
- iii. "Java Script Language - Chapter 1 Introduction", Netscape Communications, April 23, 2001
- iv. "Microsoft Professional Developers Conference Summary", Tuecke, 1996
- v. "XML RPC Specification", Dave Winer, June 15, 1999

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chad Zhong whose telephone number is (571)272-3946. The examiner can normally be reached on M-F 7:15 to 4:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAROENCHONWANIT, BUNJOB can be reached on (571)272-3913. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained

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from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CZ  
December 29, 2005



BUNJOB JAROENCHONWANIT  
SUPERVISORY PATENT EXAMINER